of the American Entomological Society for \$100 is herewith presented to the Academy.

The following have been elected to fill the several offices of the Section for the year 1877:—

Conservator . . . . James Ridings.

Publication Committee . . . E. T. Cresson,

J. L. LeConte, M.D.,

Chas. A. Blake, Geo. H. Horn, M.D., Chas. Wilt.

James Ridings, Conservator.

# REPORT OF THE CONSERVATOR OF THE BOTANICAL SECTION.

The Conservator presents this first report since the organization of the Botanical Section, upon the condition of, the additions to, and the needs of the Academy's Herbarium. The Section has been so recently established, that such a report may be expected to be but imperfect, and to be regarded rather as preliminary than otherwise. But as much work has been done during the year by the Committee on Botany, appointed under the old bylaws of the Academy, aided by the volunteer efforts of other members, who will, it is hoped, continue to co-operate with the Section, it will be proper to embrace a retrospect of what has been done during the whole year.

And first, the Conservator would congratulate the members of the Section and of the Academy, as well as the scientific public, that the botanical treasures of the Academy have been exhumed from the dusty and dingy den in which they were entombed in the former building, and that they are now made really accessible to students. The removal was accomplished at the beginning of the year. Before attempting to re-arrange the collection, the leading Herbaria of the country were visited, and the details of their arrangements examined. For very valuable suggestions in this regard we are indebted to Prof. Gray, of Cambridge; and also to Prof. Eaton, of New Haven; and to P. V. Leroy, the Curator of the Torrey Herbarium, at Columbia College, New York. Our own Curators, availing themselves of these and other suggestions, have spared no pains or expense in fitting up for our department a series of shelves and eases which fully meet our present wants, and which are in every way suitable to the eareful preservation of the plants, and for facility of comparison and study. It is due to Mr. Tryon to say that, fully appreciating our needs in this respect, he entered heartily into the plans, and, as Curator, gave them his eareful supervision.

These eases were completed about the 1st of May, and the labor of transferring the plants from the old unwieldy portfolios to the new shelves was carried on and completed during the summer mainly by the aid of Messrs. Mechan, Burke, and Parker. Among the packages removed from the old building were enormous piles of duplicate specimens which had been accumulating for years, some of which had lain buried, suffering from the ravages of insects, and few of which had been earefully examined. These, by the labors of Messrs. Burke, Mechan, Schimmel, Leffman, and others, have been examined, the ruined plants thrown out, and the remainder brought into some kind of partial arrangement, which, when completed, will enable us to select from these stores such specimens as may be desirable for the Herbarium, and to render the remainder useful for purposes of exchanges. This labor our Committee on Duplicates will doubtless continue and complete.

The Committee on the Herbarium, at its last meeting, decided on the general arrangement of the collection on a plan similar to that adopted at the Kew Gardens, and at Dr. Gray's Herbarium at Cambridge. The Conservator is now preparing the necessary tablets for displaying the names of the Natural Orders, and the lists of the Genera in each order. When this work is completed, the case of consulting the Herbarium will be vastly increased, and any one of the 9000 known genera may be turned to, as readily as to a word in the dictionary.

During the past year the following donations have been received for the Academy's Herbarium:—

185 lots of cones of Conifera, and aeorns of Oaks. Presented by Josiah Hoopes.

31 species of Plants, eollected near Peking, China, by Rev. S. Wells Williams, 1868-9. Presented by John H. Redfield.

171 species of Plants, from Norwegian Mountains, collected by Prof. Willhelm Bork. Presented by Dr. H. C. Wood.

Leaves of Argyroxiphium Sandwicence, from the volcanoes of Kileau, Hawaii, Sandwich Islands. Presented by J. A. Ryder.

Branch of *Pinus pungens*, bearing cones. Presented by Dr. Isaac Lea.

Specimen of Gaylussacia brachycera, Gray, from Millsborough, Sussex County, Delaware. Collected and presented by W. M. Canby.

Speeimen of Rice Grass, *Paspalum*, from prairies, Sedgwick County, Kansas. Presented by Atchinson, Topeka, and Sante Fé Railroad Company.

Sample Alfalfa, raised by W. H. Egan, Sedgwick County, Kansas. Presented by Atchinson, Topeka, and Sante Fé Railroad Company.

Specimen of *Habenaria rotundifolia*, from N. Vermont, a new locality. Presented by Dr. A. Gray.

Several specimens of Salix longifolia, with abnormally developed buds, produced by the sting of an insect. From the banks of the Peeos River, Texas. Presented by Lieut. A. C. Markley.

Specimen of Onoclea sensibilis, L., Var. obtusifolia, Torr., from near Germantown. Presented by Isaae C. Martindale.

Bark from which Tapa eloth is made. From Samoan or Navigators' Islands. Presented by Dr. Ruschenberger.

Specimens of *Leonurus glaucus*, collected near the mouth of Wissahiekon Creek. Presented by I. C. Martindale.

Hydnum ——? Presented by Mr. Whelen.

Cone of *Pinus coulteri*, *Cupressus*, n. sp., and *Pinus sabriniana*. From California. Presented by Mr. Begg.

A collection of Woods, Coffee, Cotton, Fibres, Bark, Seeds, Resins, India-rubbers, Leaf Tobacco, Sarsaparilla, Cone of Aurocaria, etc. From Brazil. Presented by Dr. Jose de Saldanha da Gama, of the Brazilian Commission.

Cypress Knee, from Arkansas. Presented by Dr. Lawrence. Specimens of Cotton, Millet, etc., from Arkansas. Presented by Dr. Geo. W. Lawrence.

Four species of Ferns: Asplenium pinnatifidum, A. trichomanes, A. montanum, and Trichomanes radicans. Collected at

Rock Castle Springs, Kentucky. Presented by Miss G. H. Rule, through J. C. Martindale.

Cone of *Pinus Torreyana*, Parry, from Southern San Diego County, California (Pallner Collection, No. 368). Presented by John H. Redfield.

As regards the future needs of our Herbarium, both as to arrangement and as to perfecting the collection, the Conservator has but too recently entered upon his duties to speak fully. It is sufficient now to say that there is already apparent the need of an enormous amount of labor, both scientific and mechanical, and of considerable expenditure, to make our collection what it ought to be. The completion of the Order tablets, and the arranging of the plants in the new genus covers, will absorb much labor, but will require little expenditure beyond what has already been incurred. But we must look forward to the day when the whole of our large collection shall be properly mounted upon paper, as the only way to preserve the specimens from injury in handling, and from a still greater danger, that of confusion arising from misplacing of labels. There is great reason to believe that we have suffered very greatly from such misplacement in times past, and that many type specimens of Nuttall and others have become subjected to doubt, and thus deprived of value. But before this consummation can be properly reached, there is a vast amount of careful, conscientious, and critical scientific work to be done, especially in the general Herbarium, in the re-claboration of the determinations, culling out of rubbish, and replacement of inferior specimens by better, and in cataloguing with reference to the supply of our deficiencies.

In all these departments there is plentiful room for the labor of all the young botanists of the Academy, and for all the knowledge of the older ones.

> JOHN H. REDFIELD, Conservator.

The election of Officers for 1877 was held in accordance with the by-laws with the following result:—

President . . . W. S. W. Ruschenberger, M.D.

Vice-Presidents . . . Wm. S. Vaux,

J. L. LcConte, M.D.

Recording S	Secretary .	Edw.	J. Nolan,	M.D.
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#### Councillors to serve three J. S. Haines,

### Councillors to serve an unexpired term of two years Chas. P. Perot.

## Jos. Wharton,

### Finance Committee.

Wm. S. Vaux, Aubrey H. Smith, Edw. S. Whelen.

### ELECTIONS DURING 1876.

#### MEMBERS.

January 25.—Rev. W. Q. Scott, Dr. Henry M. Fisher, Dr. Alfred Whelen, Dr. W. F. Waugh, U. S. N., Edwin H. Fitler, Charles L. Sharpless, Charles H. Rogers, Dr. Wm. R. Cruice.

March 7.—Wm. Harris Kneass, James H. Windrim, Crozer Griffith, Jesse W. Starr, Wm. L. Abbott, Robert Wood, Thomas S. Root, Howard Spencer, James Ridings, Jas. W. McAllister, Charles Wilt, Wm. S. Pine, John Meichel, Charles A. Blake, James H. Ridings, Geo. B. Dixon, Geo. Biddle, Horace F. Jayne, J. Sergeant Price.

March 28 .- John Akhurst, Theo. L. Mead, Stuart Wood, Dr. John Eekfeldt, Edward Tatnall, Jr., Benj. H. Smith, James M. Rhodes, John T. Lewis, Jr., John S. Martin, Henry Pemberton, Charles W. Trotter, Charles Roberts, Edward K. Tryon, Edward Potts, Pierre Munzinger, Dr. Washington Hopkins Baker, Rathmell Wilson.